IN THE CLAIMS

Please amend the claims as follows:

Claim 1. (Currently Amended) A liquid injector for injecting at least a contrast medium into a subject whose fluoroscopic image is to be captured by an imaging diagnostic apparatus, wherein said contrast medium is available in a plurality of types having different concentrations of an effective component, comprising:

a liquid injection mechanism for injecting at least said contrast medium into said subject;

condition storage means for storing data of operating conditions of said liquid injection mechanism for each of a plurality of regions to be imaged of a human body;

image storage means for storing data of schematic images of a plurality of body sections of the human body and schematic images of a plurality of regions to be imaged of the human body in association with each other; section display means for displaying the schematic images of the body sections in the shape of a human body;

section input means for accepting an input action to select one of the displayed schematic images of the body sections;

region displaying means for displaying the schematic image of at least one of said regions to be imaged in relation to the selected schematic image of the body section;

region input means for accepting an input action to select the displayed schematic image of at least one of said regions to be imaged;

operation reading means for reading the data of operating conditions corresponding to the selected schematic image of at least one of said regions to be imaged; and

injection control means for controlling operation of said liquid injection mechanism under the operating conditions whose data have been read;

liquid storage means for storing data of said concentration and a product name of the contrast medium;

liquid display means for displaying said product name of the contrast medium;

liquid input means for accepting an input action to select one of the displayed product names;

liquid reading means for reading the data of the concentration corresponding to the selected product name; and

operation adjusting means for adjusting said operating conditions depending on the read data of the product name.

Claim 2. (Original) A liquid injector according to claim 1, wherein said liquid injection mechanism comprises a medium injection mechanism for injecting a contrast medium and a solution injection mechanism for injecting a saline solution, said condition storage means comprises means for storing data of operating conditions for interlinking said medium injection mechanism and said solution injection mechanism for each of said regions to be imaged, and said injection control means comprises means for controlling operation of said medium injection mechanism and said solution injection mechanism which are interlinked under the operating conditions whose data have been read.

Claim 3. (Original) A liquid injector according to claim 1, wherein said condition storage means comprises means for storing, as said operating conditions, data of a variable pattern in which an injection rate of said contrast medium is changed with time to keep said fluoroscopic image in a predetermined contrast range, and said injection control means comprises means for changing, with time, an operating speed of said liquid injection mechanism depending on said variable pattern.

Claim 4. (Original) A liquid injector according to claim 3, wherein said condition storage means comprises means for storing the data of the variable pattern in which the contrast of said fluoroscopic image produced by said contrast medium approximates an optimum level.

Claim 5. (Original) A liquid injector according to claim 1, further comprising:

body display means for displaying a plurality of body items of said human body in relation to capturing of said fluoroscopic image; and

body input means for accepting an input action to select one of the displayed body items;

wherein said condition storage means comprises means for storing said operating conditions for each of said body items, and said operation reading means comprises means for reading the data of the operating conditions corresponding to the selected body item.

Claim 6. (Original) A liquid injector according to claim 1, further comprising:

body display means for displaying a plurality of body items of said human body in relation to capturing of said fluoroscopic image;

body input means for accepting an input action to select one of the displayed body items; and

operation adjusting means for adjusting said operating conditions depending on the selected body item.

Claim 7. (Original) A liquid injector according to claim 1, further comprising:

body input means for accepting entered data of body items of said human body in relation to capturing of said fluoroscopic image; and

operation adjusting means for adjusting said operating conditions depending on the entered data of body items.

Claim 8. (Original) A liquid injector according to claim 7, further comprising:

medium loading means for removably loading an information storage medium which stores the data of body items for said subject;

said body input means comprising means for entering the data of body items from said information storage medium which is loaded.

Claim 9. (Original) A liquid injector according to claim 7, wherein said body input means comprises means for entering the data of body items on-line from an external database device which stores the data of body items for said subject.

Claim 10. (Original) A liquid injector according to claim 7, wherein said body input means comprises means for detecting the data of body items from said subject and entering the detected data of body items.

Claim 11. (Original) A liquid injector according to claim 5, wherein said body items include at least one of a body weight, a body shape, an age, and a gender.

Claim 12. (Original) A liquid injector according to claim 1, wherein said contrast medium is available in a plurality of types having different liquid items in relation to capturing of said fluoroscopic image, further comprising:

liquid display means for displaying said types of the contrast medium; and

liquid input means for accepting an input action to select one of the displayed types of the contrast medium;

wherein said condition storage means comprises means for storing the data of operating conditions for the types of the contrast medium, and said operation reading means comprises means for reading the data of operating conditions corresponding to the selected type of the contrast medium.

Claim 13. (Cancelled).

Claim 14. (Original) A liquid injector according to claim 1, wherein said contrast medium is available in a plurality of types having different liquid items in relation to capturing of said fluoroscopic image, further comprising:

liquid storage means for storing data of said liquid items for the types of the contrast medium;

liquid input means for accepting entered data of a type of the contrast medium; liquid reading means for reading the data of the liquid item corresponding to the entered data of the type of the contrast medium; and

operation adjusting means for adjusting said operating conditions depending on the read data of the liquid item.

Claim 15. (Original) A liquid injector according to claim 1, wherein said contrast medium is available in a plurality of types having different liquid items in relation to capturing of said fluoroscopic image, further comprising:

liquid display means for displaying said liquid items; and

liquid input means for accepting an input action to select one of the displayed liquid items;

wherein said condition storage means comprises means for storing the data of operating conditions for said liquid items, and said operation reading means comprises means for reading the data of operating conditions corresponding to the selected liquid item.

Claim 16. (Original) A liquid injector according to claim 1, wherein said contrast medium is available in a plurality of types having different liquid items in relation to capturing of said fluoroscopic image, further comprising:

liquid display means for displaying said liquid items;

liquid input means for accepting an input action to select one of the displayed liquid items; and

operation adjusting means for adjusting said operating conditions depending on the selected liquid item.

Claim 17. (Original) A liquid injector according to claim 1, wherein said contrast medium is available in a plurality of types having different liquid items in relation to capturing of said fluoroscopic image, further comprising:

liquid input means for accepting entered data of a liquid item; and

operation adjusting means for adjusting said operating conditions corresponding to the entered data of the liquid item.

Claim 18. (Cancelled).

Claim 19. (Original) A liquid injector according to claim 1, wherein said imaging diagnostic apparatus is available in a plurality of types having different imaging items in relation to capturing of said fluoroscopic image, further comprising:

imaging apparatus display means for displaying the types of the imaging diagnostic apparatus; and

imaging apparatus input means for accepting entered data of a selected one of the displayed types of the imaging diagnostic apparatus;

wherein said condition storage means comprises means for storing the data of operating conditions for the types of the imaging diagnostic apparatus, and said operation reading means comprises means for reading the data of operating conditions corresponding to the selected type of the imaging diagnostic apparatus.

Claim 20. (Original) A liquid injector according to claim 1, wherein said imaging diagnostic apparatus is available in a plurality of types having different imaging items in relation to capturing of said fluoroscopic image, further comprising:

imaging storage means for storing data of said imaging items for the types of the imaging diagnostic apparatus;

imaging display means for displaying said types of the imaging diagnostic apparatus;

imaging input means for accepting entered data of a selected one of the displayed types of the imaging diagnostic apparatus;

imaging reading means for reading the data of the imaging item corresponding to the selected type of the imaging diagnostic apparatus; and

operation adjusting means for adjusting said operating conditions depending on the read data of the imaging item.

Claim 21. (Original) A liquid injector according to claim 1, wherein said imaging diagnostic apparatus is available in a plurality of types having different imaging items in relation to capturing of said fluoroscopic image, further comprising:

imaging display means for displaying said imaging items;

and imaging input means for accepting entered data of a selected one of the displayed imaging items;

wherein said condition storage means comprises means for storing the data of operating conditions for said imaging items, and said operation reading means comprises means for reading the data of operating conditions corresponding to the selected imaging item.

Claim 22. (Original) A liquid injector according to claim 1, wherein said imaging diagnostic apparatus is available in a plurality of types having different imaging items in relation to capturing of said fluoroscopic image, further comprising:

imaging display means for displaying said imaging items; and

imaging input means for accepting entered data of a selected one of the displayed imaging items;

and operation adjusting means for adjusting said operating conditions depending on the selected imaging item.

Claim 23. (Original) A liquid injector according to claim 1, wherein said imaging diagnostic apparatus is available in a plurality of types having different imaging items in relation to capturing of said fluoroscopic image, further comprising:

imaging input means for accepting entered data of an imaging item; and

operation adjusting means for adjusting said operating conditions corresponding to the entered data of the imaging item.

Claim 24. (Currently Amended) A liquid injector according to claim 19, wherein said imaging apparatus input means comprises means for accepting an input action to enter said data of the selected imaging item.

Claim 25. (Original) A liquid injector according to claim 19, further comprising:

medium loading means for removably loading an information storage medium which stores the data of the selected imaging item for each of said imaging diagnostic apparatus;

said imaging input means comprising means for entering the data of the selected imaging item from said information storage medium which is loaded.

Claim 26. (Original) A liquid injector according to claim 19, wherein said imaging input means comprises means for entering the data of the selected imaging item on-line from said imaging diagnostic apparatus.

Claim 27. (Original) A liquid injector according to claim 23, further comprising:

medium loading means for removably loading an information storage medium which stores the data of the imaging items for said imaging diagnostic apparatus;

said imaging input means comprising means for entering the data of the imaging

items from said information storage medium which is loaded.

Claim 28. (Original) A liquid injector according to claim 23, wherein said imaging

input means comprises means for entering the data of the selected imaging item on-line from

said imaging diagnostic apparatus.

Claim 29. (Original) A liquid injector according to claim 19, wherein said imaging

items represent an imaging speed of said fluoroscopic image.

Claim 30. (Original) A liquid injector according to claim 1, further comprising:

medium loading means for removably loading an information storage medium which

stores the data of operating conditions; and

condition updating means for reading the data of operating conditions from said

information storage medium which is loaded and updating the data of operating conditions

stored in said condition storage means with the read data of operating conditions.

Claim 31. (Original) A liquid injector according to claim 1, further comprising:

condition input means for entering the data of operating conditions on-line; and

condition updating means for updating the data of operating conditions stored in said

condition storage means with the data of operating conditions entered on-line.

Claim 32. (Original) A liquid injector according to claim 1, further comprising:

operation display means for displaying the data of operating conditions;

operation input means for accepting a manual action to correct the displayed data of

operating conditions; and

condition updating means for updating the data of operating conditions stored in said

condition storage means with the corrected data of operating conditions.

Claim 33. (Original) A liquid injector according to claim 1, further comprising:

operation display means for displaying the data of operating conditions which are read

for the selected region to be imaged;

operation input means for accepting a manual action to correct the displayed data of

operating conditions; and

operation adjusting means for correcting the data of operating conditions based on

said manual action.

Claim 34. (Original) A liquid injector according to claim 1, further comprising:

an injection head for removably holding a liquid syringe which comprises a cylinder

filled with at least a contrast medium and a piston slidably inserted in said cylinder; and

a display panel connected parallel to said injection head for displaying various data

thereon;

said liquid injection mechanism comprising means for moving said cylinder and said

piston relatively to each other while said liquid syringe is being held by said injection head;

said

section display means comprising means for displaying the schematic images of the

body sections on said display panel;

said region displaying means comprising means for displaying the schematic image of

at least one of said regions to be imaged on said display panel.

Claim 35. (Original) A liquid injector according to claim 34, wherein

said display panel comprises a touch panel for detecting a manual action applied

thereto;

said section input means comprising means for detecting a manual action applied to

one of the schematic images of the body sections displayed on said touch panel;

said region input means comprising means for detecting a manual action applied to

one of the schematic images of the regions to be imaged which are displayed on said touch

panel.

Claim 36. (Original) A liquid injector according to claim 34, further comprising:

pressure detecting means for detecting in real-time a pressure of at least said contrast

medium injected into said subject;

and pressure displaying means for displaying in real-time the detected pressure on

said display panel.

Claim 37. (Currently Amended) A method of injecting at least a contrast medium with

a liquid injection mechanism into a subject whose fluoroscopic image is to be captured by an

imaging diagnostic apparatus, wherein said contrast medium is available in a plurality of

types having different concentrations of an effective component, comprising the steps of:

storing data of operating conditions of said liquid injection mechanism for each of a

plurality of regions to be imaged of a human body;

storing data of schematic images of a plurality of body sections of the human body

and schematic images of a plurality of regions to be imaged of the human body in association

with each other;

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displaying the schematic images of the body sections in the shape of a human body;

receiving an input action to select one of the displayed schematic images of the body sections;

displaying the schematic image of at least one of said regions to be imaged in relation to the selected schematic image of the body section;

receiving an input action to select the displayed schematic image of at least one of said regions to be imaged;

reading the data of operating conditions corresponding to the selected schematic image of at least one of said regions to be imaged; and

controlling operation of said liquid injection mechanism under the operating conditions whose data have been read;

storing data of said concentration and a product name of the contrast medium;

displaying said product name of the contrast medium;

accepting an input action to select one of the displayed product names;

reading the data of the concentration corresponding to the selected product name; and

adjusting said operating conditions depending on the read data of the product name.

Claim 38. (Currently Amended) A computer program for controlling a liquid injector for injecting at least a contrast medium with a liquid injection mechanism into a subject whose fluoroscopic image is to be captured by an imaging diagnostic apparatus, so as to enable said liquid injection mechanism to carry out a process, wherein said contrast medium is available in a plurality of types having different concentrations of an effective component, which comprises the steps of:

storing data of operating conditions of said liquid injection mechanism for each of a plurality of regions to be imaged of a human body;

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storing data of schematic images of a plurality of body sections of the human body and schematic images of a plurality of regions to be imaged of the human body in association with each other;

displaying the schematic images of the body sections in the shape of a human body;

receiving an input action to select one of the displayed schematic images of the body sections;

displaying the schematic image of at least one of said regions to be imaged in relation to the selected schematic image of the body section;

receiving an input action to select the displayed schematic image of at least one of said regions to be imaged;

reading the data of operating conditions corresponding to the selected schematic image of at least one of said regions to be imaged; and

controlling operation of said liquid injection mechanism under the operating conditions whose data have been read;

storing data of said concentration and a product name of the contrast medium;

displaying said product name of the contrast medium;

accepting an input action to select one of the displayed product names;

reading the data of the concentration corresponding to the selected product name; and

adjusting said operating conditions depending on the read data of the product name.

Claim 39. (Original) An information storage medium storing data of a computer program according to claim 38 for controlling a liquid injector for injecting at least a contrast medium with a liquid injection mechanism into a subject whose fluoroscopic image is to be captured by an imaging diagnostic apparatus.